Towns of Franklin and Swampscott
D.T.E. 03-98
Witness: Nutting

Direct Testimony

Of

Jeffrey D. Nutting

Direct Testimony of Jeffrey D. Nutting
Franklin Town Administrator

Q. Please state your full name and business address.

A. Jeffrey D. Nutting, Franklin Municipal Building, 150 Emmons St., Franklin, MA 02038

Q. Please describe your educational background.

A. I graduated from Northeastern University in 1979 with a BA political science.

Q. Please describe your professional background.

A. I am the Town Administrator for the Town of Franklin, and have served in that position for the past 3 years. Prior to that, I was employed as the Town Administrator for the Town of Stoneham from December 1992 to Feb 2001. I have served in various capacities in local municipal government since 1980, including, for example, Selectman, Chairman of Finance Committee, and Chairman of the School Committee.

Q. Are you an accountant?

A. No.

Q. Do you have any background in utility rate regulation or utility property appraising?

A. No.

Q. Please describe your role and your interest in this streetlight dispute.

A. My principal role has been to oversee and supervise the due diligence in Franklin to evaluate the purchase price and supporting data offered by Mass Electric. My job as Town Administrator is to advise the Town Council whether or not the business proposition advanced by Mass Electric is fair and reasonable, and whether the purchase price complied with the statute and the DTE rules.

Q. Have you had any prior experience with the streetlight conversion statute in your prior municipal positions?

A. Yes, as the Town Administrator in Stoneham, I implemented a streetlight conversion in that Town. That included negotiation with Boston Edison regarding the purchase price of the streetlights in Stoneham.

Q. What were the issues in that negotiation?

A. As I recall, we negotiated regarding our right to purchase some but not all of the lights, we negotiated regarding the repairs to the streetlights that we were interested in purchasing, and we negotiated the appropriate allocation of net book value between lights that we were purchasing and lights the utility was retaining.

Q. Can you recall any more specific details regarding that negotiation?

A. No, that negotiation occurred more than four years ago.

Q. As far as you know, was the net book value calculation of the streetlight purchase price in Stoneham calculated by the utility in a fashion that complied with D.T.E. 98-89?

A. Yes, my understanding is that the depreciation rates used in Stoneham were the same depreciation rates that had been approved in D.T.E. 98-89. My understanding is that the utility had tried in that earlier streetlight dispute to use a lower depreciation rate that reflected the composite depreciation rate on all distribution plant equipment. My understanding is that the Company tried to use that lower depreciation rate for a period of time in which there were no Department approved streetlight specific depreciation rates. The ruling, as I understand it, was that *streetlight specific* depreciation rates needed to be used that *reflected the useful life of streetlight equipment*, and that the *5.27% rate* proposed by the Towns was the depreciation rate that *was used as a result of that* ruling in D.T.E. 98-89, in place of the lower rate, which had been assumed by the Company for the years following 1992.

Q. And do you understand that this 5.27% depreciation rate was used for that same period of time in Stoneham?

A. Yes, I believe it is from 1993 forward.

Q. Do you know whether or not the Stoneham net book value calculation complied with the Department ruling in D.T.E. 01-25?

A. The Stoneham streetlight purchase predated the ruling in D.T.E. 01-25, but the Stoneham streetlight purchase was calculated using Stoneham-specific retirement data, so I believe that it would comply with the later ruling in D.T.E. 01-25, as well.

Q. So is it your understanding that the single net book value purchase price calculated by Boston Edison for Stoneham complies with both D.T.E. 98-89 and D.T.E. 01-25?

A. That is my understanding.

Q. And is it your understanding that the net book value purchase price calculated for Stoneham was the same net book value calculated by Boston Edison for the purpose of paying property taxes?

A. That is my understanding.

Q. Have you completed your due diligence regarding the Mass Electric purchase price in Franklin?

A. I have.

Q. And do you feel that the purchase price offered by Mass Electric to Franklin is fair and reasonable?

A. I do not.

Q. Why not?

A. We have two basic complaints with respect to the Mass Electric Purchase price. Our first complaint is that the overall value of the total streetlight plant in Franklin, calculated by Mass Electric, understates the depreciation, and as a result, overstates the net book value selling price. Our second complaint is that the overall plant value is unfairly allocated between the streetlight plant to be sold and the streetlight plant to be retained by Mass Electric.

Q. Perhaps, we could take the overall plant value question first. What is the basis for your opinion that the total plant value, as calculated by Mass Electric, understates the depreciation?

A. When we started our discussion about a streetlight purchase with Mass Electric three years ago, they gave us a price of $366,290, which they explained complied with D.T.E. 98-89. Six months later, in January of 2002, Mass Electric gave us a second price that was almost $120,000 higher. They subsequently explained that this was due to the new rules established in D.T.E. 01-25.

Since other communities were purchasing their streetlights from Boston Edison at a single net book value purchase price that complied with both rulings, we didn't understand the disconnect between the two very different sets of prices proposed by Mass Electric. It appeared that Mass Electric was using an interpretation of D.T.E. 1-25 that was very different from the interpretation of the same ruling by NSTAR.

Q. Which other communities are you referring to?

A. In order to complete my due diligence regarding the purchase price in Franklin, I have reviewed the purchase price documentation used in Waltham, Watertown, Natick, Brookline and Chelsea. All five of those purchase prices were established after the ruling in D.T.E. 01-25. All five used the 5.27% depreciation rate that was approved in D.T.E. 98-89. All five purchase prices complied with both D.T.E. 98-89 and D.T.E. 01-25.

I have also discussed the Chelsea purchase price negotiation with Mr. Maylor, the Town Administrator of Swampscott, and my Co-petitioner in this proceeding. Mr. Maylor was the deputy City Manager in Chelsea. He oversaw and managed the negotiation with Boston Edison regarding the purchase of the Chelsea streetlights from Boston Edison.

Q. When was the Chelsea purchase price established?

A. Chelsea was negotiated in the three months following the ruling in D.T.E. 01-25. Mr. Maylor, my Co- petitioner in this proceeding, tells me that the Department participated in the settlement discussions between Chelsea, and three other municipalities and the Company, and that a single price was established in Chelsea, and in of the other three communities, which complied with both D.T.E. 98 -89 and DTE 01-25.

Q. Are you familiar with any other streetlight purchase calculations?

A. I have reviewed the material included in Mr. Moody's exhibit regarding the Waltham purchase price. It is my understanding that the purchase price in Waltham was established as the result of a D.T.E. ruling in 2002, well after the August 2001 ruling in D.T.E. 01-25, that a single Waltham purchase price was approved by the Department that complied with D.T.E. 01-25, because it used Waltham-specific retirement values, and that single price also used the depreciation rates approved in D.T.E. 98-89.

Q. Perhaps we could get back to the Franklin purchase price. You testified that you received two purchase prices from Mass Electric that were $118,000 apart, and that the Company justified the difference between the two prices as the difference between the purchase price formulas in D.T.E. 98-89 and D.T.E. 01-25.

A. That is correct.

Q. Did you have any other basis for concern about the purchase price?

A. Yes, as we got further and further into our due diligence it became apparent that the net book value for sale reasons was approximately $100,000 higher than net book value for tax compliance reasons.

Q. Are you referring to the two book value calculations done for tax year 1997.

A. At our request, the Company provided us with the net book value calculated for the year ending 1997. We then asked our technical consultant Stone and Webster if they could reorganize the purchase price values provided by Mass Electric in a fashion that would allow us to make a direct comparison of the book value for sale purposes (as of 1997) and the book value for tax reasons (as of 1997). This comparison of these two 1997 values exposed the $100,000 difference in these two book value calculations.

Q. Do you know if the tax book value calculation used by Mass Electric in Franklin used Franklin specific retirement values?

A. I don't know for sure. It was my impression, however, that the procedure for computing net book value for property tax reasons was standardized across all utilities, and all communities, through a court case. I would expect that the tax net book formula used by Mass Electric in Franklin would be the same tax net book formula used by NSTAR in Stoneham. So my assumption is that Franklin-specific retirement values were used by Mass Electric, in the same way that Stoneham-specific retirement values were used in Stoneham.

Q. What is your understanding of the ruling on D.T.E. 01-25?

A. My understanding is that the Cape Cod towns in that dispute complained because the utility had understated the depreciation. More specifically, the Company had used territory wide retirement values to allocate territory wide depreciation to each town. Consequently, as long as the overall streetlight plant value was positive in the service territory, every community would also have a positive value, irrespective of the fact that the streetlights might be fully depreciated in a particular community.

Q. Is it your opinion that the ruling in D.T.E. 01-25 overturned the ruling in D.T.E. 98-89?

A. No, my understanding is that the ruling in D.T.E. 01-25 expressly affirmed the formula used in D.T.E. 98-89, because that D.T.E. 98-89 formula used community specific retirement values.

Q. How did D.T.E. 01-25 change the ruling in D.T.E. 98-89?

A. My understanding is that since the Company did not have reliable community specific retirement records, the Company was required to calculate the sale value for those Cape Cod towns by simply subtracting the accumulated depreciation from the original installed cost of the streetlight plant. The Company was not allowed to use service territory wide retirement values. The Company was not allowed to allocate the accumulated reserve for the territory to individual towns using service territory wide retirement values.

Q. How might D.T.E. 01-25 apply in the Franklin situation?

A. If Mass Electric used Franklin-specific retirement values in the tax book value calculation in Franklin, then, my understanding is that there should be one book value that is calculated for both sale and tax reasons that complies with both D.T.E. 98-89 and 01-25.

If on the other hand, the Company used service territory wide retirement values in the tax calculation in Franklin, then D.T.E. 01-25 would permit a sale value that is different from the tax value, but only to the extent that there is a difference between the service territory wide retirement values and the Franklin-specific retirement values.

Q. Do you think there are other differences, aside from the potential difference in retirement values, which accounts for the difference between the Company's D.T.E. 98-89 price and the Company's D.T.E. 01-25 price?

A. Yes, I do.

Q. What are those other differences?

A. First, the Company has used Department approved depreciation rates back to 1971, and then used an assumed depreciation rate of 4% for the 50 plus years prior to 1971.

Q What is wrong with that?

A. That is contrary to the ruling regarding depreciation rates in D.T.E. 98-89. Communities all over Greater Boston are purchasing their streetlights using the depreciation rate of 5.27% for the period in which a depreciation rate needs to be assumed. That rate was determined in D.T.E. 98-89 to appropriately represent the useful life of streetlight equipment. It has been applied uniformly to all communities, irrespective of the distinctions that might exist between some communities regarding the type of streetlight fixtures. It is my opinion that the Mass Electric assumption of a 4% depreciation rate for the period prior to 1971 is contrary to the ruling in D.T.E. 98-89 regarding depreciation rates.

Q. Do you know if D.T.E. 01-25 altered in any way the D.T.E. 98-89 ruling regarding streetlight specific depreciation rates?

A. My understanding is that D.T.E. 01-25 did not alter the earlier ruling in D.T.E. 98-89 with respect to depreciation rates.

Q. Aside from the assumed depreciation rate of 4% for the period prior to 1971, do you have any other concerns with respect to Mass Electric calculation?

A. Yes, we do not believe that the sale calculation is based on subtracting accumulated depreciation from the original cost of the streetlights.

Q. Could you explain why you have this opinion?

A. The Company has explained in response to our discovery requests that at least with respect to brackets and foundations, the values reported by the Company in the installation column in 1980 and 1983 merely reflect a transfer of the dollars associated with equipment into a bracket-specific account in 1980, and a foundation-specific account in 1983. From what we can see from the Company's data, depreciation on these brackets, and depreciation on these foundations, is only generated from the transfer date forward. Consequently, at least with respect to brackets and foundations, and we would like to determine if there other examples of

this, the community has been paying for depreciation (through the streetlight tariffs) for every year since the brackets and foundations were first installed, but the plant's net value is only reduced by depreciation from the transfer date forward.

We don't believe the Company's formula uses the original installation costs of the brackets and foundations less the depreciation earned since that original installation. We think it is, instead, the Company is using some transfer value, depreciated only from the date of the transfer.

Q. Do you have other concerns about the overall plant value?

A. I am not confident that we have uncovered or tested all of the assumptions used by the Company to create this purchase price, when they first developed the formula for doing so, two years ago. I would be much more comfortable, if we were dealing with one set of books, with one set of annual additions, with one common starting point in the carry over balances in 1963 for gross plant and accumulated depreciation, and if the only deviation from that one common set of books was the listing of annual community specific retirements in each year (to the extent that that community specific listing is different from the retirement values already used by Mass Electric for tax net book reasons.)

Q. Perhaps we could turn to your second concern, which I believe had to do with allocation of plant value. What are your concerns with respect to the allocation issue?

A. The Company allocates the overall plant value between streetlight plant to be purchased and the streetlight plant to be retained based on a revenue allocator. A dedicated pole installed in 1987 has the same value as a dedicated pole installed in 2003, because they both generate the same revenue. A 4000 lumen overhead streetlight installed for the Town in 1991 has the same value as an overhead 4000 lumen streetlight installed for a private party in 2001. The Company has explained that they don't have vintage information, and further, that they have no way of distinguishing private developer streetlight additions, or commercial customer streetlight additions, from municipal streetlight additions. This results in a very unfair allocation of plant value.

Q. Why?

A. Because in Franklin, we happen to know that there has been a considerable amount of private streetlight activity since the end of the sodium conversion, and that private activity since the sodium conversion stands in stark contrast to the relatively minimal municipal streetlight activity since the sodium conversion. That allocation formula burdens the older municipal lights with the book value of the newer private lights. Or stated another way, that allocation formula, takes the depreciation that Franklin has been paying for many years on older lights and uses that depreciation, paid in by the community, to reduce the value of the newer streetlights retained by the Company.

Q. Can you explain the approach that Franklin took to making a more equitable allocation?

A. Let me first refer to exhibit JDN -1. Table 1 of that exhibit shows the net book value of the additions since the completion of our sodium conversion to be $179,095.75 (or approximately 53% of the net book value of the existing plant). This number comes directly from a sort of the purchase price values for existing plant as provided to us by Mass Electric. That is the Company's number for the unamortized value of the additions since the completion of the sodium conversion, not the Town's number.

Table 2 in the same exhibit also uses the Mass Electric existing plant values since January 1996. This second table sorts the same $179,095.75 (in depreciated book value) into the equipment groupings provided by Mass Electric. You can see that all of the dollars reported by Mass Electric relate to four categories of capital cost:

1) New underground equipment (dedicated poles, foundations, underground wire)
2) New brackets
3) New fixtures
4) Account 106

Account 106 represents capital costs that are so recent that they have not been allocated yet to one of the other equipment groupings.

Q. What use did you make of information in Table 2 of your first exhibit?

A. We were interested in trying to find out what percentage of the capital additions activity since the end of the sodium conversion related to municipal as opposed to non-municipal activity. Our starting point, therefore, was the universe of that activity as reported by Mass Electric. From that starting point, we wanted to determine what percentage of those MECO reported capital cost for poles and associated underground equipment, what percentage of those MECO reported capital cost for brackets, and what percentage of those MECO reported capital cost for new fixtures, related to municipal activity.

Q. How did you go about determining the percentage of those MECO reported capital cost for poles, brackets, and fixtures related to municipal activity?

A. We looked first at the new capital additions for poles, brackets and fixtures requested by Franklin. Staff in my office collected all of the requests made by the Town since January 1996. Table 3 in my first exhibit represents a summary count of the 98 municipal requests made in those letters. You will note that we have itemized in that summary table the requests by year, and indicated whether it related to new fixtures, the request to move an existing fixture, the request to change the lumen size

of fixtures, or merely an indication that Town was accepting payment responsibility from the developer for previously installed overhead fixtures.

Table 3 is conservative in favor of the Company in two respects. First, it is not at all clear the moving of an existing fixture and bracket from one pole to another represents a capital cost, as opposed to a maintenance cost. We have treated all moves as capital costs as if they were newly installed fixtures. Second, the acceptance of payment responsibility for overhead streetlights previously billed to the developer takes place typically one to two years after the streetlight is installed. Consequently, most, if not all, of the 11 fixtures in this column from the years 1996, and certainly some fraction of the 21 fixtures in this column for the year 1997, would have been installed prior to January 1996, and as a result, would be double-counted, if you will.

It means that additions dollars reported by MECO prior to January 1996 would have paid for these installations. In spite of that, we have treated all 98 fixtures in this table as municipal additions activity since January 1996.

Q. How does Table 3 compare to Table 4?

Table 4 is the same count of municipal requests for overhead streetlight additions since January 1996, except it is based on the municipal request letters provided by Mass Electric in response to our discovery request, as opposed to the municipal request letters that we pulled from our own files. It is organized in the exact same way, and is conservative in favor of the Company for the exact same reasons: (i.e. moves are treated as new capital additions, and payment responsibility acceptance relating to installation prior to 1996, are treated as new installations after 1996.) You will see that the number of new overhead fixtures supported by the Company's documents is 78, as opposed to the 98 reported by the Town. We have used the larger Town number of 98 new municipal requests for overhead additions for the purpose of establishing a fair allocation of plant values.

Q. Was the Company able to provide any information about other capital replacement activity that might be appropriately allocated to the Town?

A. Only indirectly. The Company stated that they could not provide any information regarding the split between municipal light additions and private streetlight additions. However, in the Company's response to our petition, the Company stated that capital replacements could be caused by things other than municipal requests. The Company cited end of life issues, premature failure, storm damage, vehicle accidents as other causes for capital replacements.

Q. How did you go about estimating the volume of capital replacements associated with these other causes.

A. We asked Brite-Lite Electrical, the company that we had selected to provide our streetlight maintenance in Franklin, for help. I believe Mr. Curran, the President of

Brite-Lite testified last week. Brite-Lite is currently maintaining approximately 10,000 streetlights in four other Massachusetts communities. Before we selected Brite-Lite to maintain the lights in Franklin, we checked with the other four communities where Brite-Lite is currently maintaining these 10,000 streetlights to see if they were satisfied with the service. Each community reported an improvement of the responsiveness of the streetlight service and reported favorably on the service they were receiving from Brite-Lite.

We asked Brite-Lite to provide us with a count of the total number of fixtures replaced, total number of brackets replaced, and total dedicated poles replaced, for any reason at all in these four other communities in the period of time that Brite-Lite has been involved.

I have attached the Brite-Lite report as Exhibit JDN 2.

Q. Do the number of fixture replacements, bracket replacements, and dedicated pole replacements include replacements occasioned by the municipality making a request for a new installation?

A. Yes, they do. That is another example of the manner in which we have been conservative in favor of the Company. The replacements listed in the Brite-Lite report represent the total number of fixtures, brackets, and poles installed by Brite-Lite for any conceivable reason, period. I believe portions of this report may have been introduced at the hearing last week. I have included the entire report because it gives more information about the comprehensiveness of the Brite-Lite count.

Q. Do you think a population of 10,000 streetlights is enough of a sample to reliably estimate capital replacement frequencies for fixtures, brackets and poles?

A. Yes, I do. I have reviewed material presented by Mass Electric back at the start of deregulation in Massachusetts. Those materials included a list of 142,448 sodium vapor streetlights in the entire Mass Electric system, as of March of 1998. I wouldn't be surprised if that number has grown since then. Pollsters routinely use a sample of 400 voters to estimate the voting behavior of tens of millions of voters. I think that a sample size of 10,000 sodium streetlights is a reasonable sample size to predict the capital replacement rates in an inventory of less than 200,000 sodium streetlights.

I would certainly have preferred to get data to make this allocation of the Company's values between municipal and private directly from the Company. But given their inability to provide this data, we were forced to make a reasoned estimate regarding that allocation. I think the approach we used was reasonable and conservative in favor of the Company.

Q. What do you know about the 10,000 streetlights in the four reference communities?

A. I know that they are sodium vapor streetlights. I know that they are of approximately the same age as our sodium vapor streetlights. I know that the capital replacement frequencies reported were for period of when those streetlights were approximately 10 years old.

I have been told that streetlight failure rates ramp up over time as the streetlights age. We are using the failure rates on 10 year old streetlights to predict the failure rates on streetlights when those lights were 1 year old, 2 years old, 3 years old, 4 yrs old, etc., up through 8 years old. The average age of the lights in the period since the sodium conversion in Franklin was 4 yrs old. So, we are effectively using capital replacement frequencies on 10 year old sodium fixtures in the reference communities to estimate capital replacement frequencies in Franklin over a period of time when the Franklin lights were on average 4 years old.

Q. What is the situation with respect to the underground streetlights since the sodium conversion?

A. As we indicated last week, we are excluding the 76 streetlights listed at the bottom of Mr. Fitzgerald's exhibit. I have attached the same exhibit to this testimony and marked it as JDN 3. We wish to purchase the first 157 poles listed in this exhibit; we do not wish to purchase the 76 poles listed at the bottom of this exhibit.

Q. Why not?

A. We have taken the position from the beginning that we do not wish to purchase streetlights on private streets. I am frankly not sure of the reason that Mass Electric included so many underground served poles on private streets.

The additional problem is the confusion regarding the S3 vs. the S20 rate. There is considerable confusion on the part of the Town about who actually owns the underground lights installed in subdivisions since 1995. 56 of the 76 lights listed on the bottom of the attached exhibit JDN 3 fall into this S3 vs. S20 "who owns the lights" confusion. The 20 other underground lights on that exhibit were installed before 1995, and therefore, are probably MECO owned, but they are on private streets.

Until we get to the bottom of this confusion, we are simply excluding these 76 streetlights, and dedicated poles, and associated underground equipment from the purchase.

Q. Mass Electric asked at last week's hearing if any of the streetlights on the list of excluded streetlights were overhead streetlights. Can you clear up that bit of confusion?

A. Every streetlight on the attached exhibit (which is the same exhibit used by Mr. Fitzgerald last week) is an underground served streetlight. All 157 lights on the

top of that list to be purchased are underground served. All 76 on the " to be excluded list" are underground served streetlights.

Q. Besides the count regarding the new request for new municipal equipment, and the capital replacement frequencies to use, and the underground streetlights to exclude, did you provide any other assumptions to Stone and Webster, so that Stone and Webster could make their allocation of the plant value calculation?

A. We provided to Stone and Webster the capital cost dollars reported by MECO in the Company's response to Department Information Request 2-2.

Q. So, could you summarize the assumptions that the Town provided to Stone and Webster?

A. We provided Stone and Webster with the following assumptions:

1) 98 new overhead installations since 1996 requested by the Town; (This was higher than the comparable MECO number.)
2) Capital Replacement frequencies for brackets, poles, fixtures; (These were all inclusive, for any and all reasons, including new installation requests in the four reference communities.)
3) 76 underground served poles and lights excluded from 1995 forward;
4) Mass Electric reported capital costs for poles, fixtures and brackets from Department Information Request 2-2.

Q. And what was the result of the Stone and Webster allocation?

A. First, Stone and Webster was reluctant to make any allocation of the retired plant values. It was their position that the corrective assumptions needed to redress the concerns about the actual vintage of the brackets and the foundations and perhaps other categories of equipment, and the actual depreciation generated by that equipment, was too speculative. They were not comfortable advancing the corrective assumptions needed to arrive at a reliable estimate of the retired plant value to be allocated.

Second, Stone and Webster did use the Town's assumptions listed above to make a net book value allocation of the existing plant values. These allocations are reproduced in exhibit JDN 4. The result was an allocation of 33.1% of the $274,885 of existing plant value **(or $90,850)** to the Town, and 66.9% of that value (or $184,035) to the portion of the plant retained by the company. We believe that this percentage allocation is much more equitable, because it reflects the older vintage of the municipal plant, as opposed to the much newer vintage of the plant retained by the Company. It reflects, for example, the retention by the Company of all of the underground values and underground lights installed since 1995. It also reflects the limited percentage of post sodium conversion overhead

additions that can be attributed to the Town using the conservative assumptions that we have described.

Stone and Webster also used that same 33.1% / 66.9% ratio to allocate the total plant value, existing plant and retired plant, using the 1997 tax net book value as a starting point and adding the additions and retirements reported by the Company since that point in time, depreciated through January 1, 2004 (using the depreciation rates used by the Company). This allocation of the total tax value, updated, was **$126,858** to the Town and $256,977 to the portion of the streetlight plant retained by the Company. If Mass Electric used Franklin-specific retirement values to calculate the 1997 tax book value, this could be the correct answer, under D.T.E. 01-25.

Stone and Webster was not willing to apply the 33.1% allocation factor to the total plant value calculated by Mass Electric (existing *and retired plant*) and put that particular allocation on their letterhead. For completeness purposes, we will do that math: 33.1% of $489,662 (MECO's total plant value depreciated through January 1,2004) would be **$162,078**.

Q. Do you have any closing comments that you wish to make?

A. We don't know what conclusion the Department may reach regarding:

1) the use of an assumed depreciation rate for 50 years at 4%;
2) the use of transfer amounts as opposed to original installed costs;
3) the omission of depreciation on major portions of streetlight plant (the brackets represents 33% of the cost of a new streetlight installation) between the original installation date and the transfer date;
4) the use of half of the retirement record;
5) the determination with respect to whether or not the 1997 tax values were based on community specific or territory wide retirement values.

Whatever the outcome on those questions, which impact the correct calculation of overall plant value, an allocation that assumes that all fixtures and all poles have the same vintage, and the same depreciation, because they generate the same revenue is not equitable, and does not comply with the statute. The Towns are the only parties in this dispute that have made a good faith effort to develop an allocation proposal that reflects the relative contribution of each sector to the depreciation that has been paid in through streetlight tariffs over the years.

Exhibit JDN 1

Table 1

Sort of Mass Electric Values for Franklin Existing Plant
Before and After Sodium Conversion

Unamortized Value Through Sodium Conversion	$158,506.09
Unamortized Value Through Since Conversion	$179,095.75
Total Unamortized Value Existing Plant	$337,601.84

Table 2

Sort of MECO Installation Dollars and Unamortized Value
Since January 1996 by Equipment Groupings:

	Installation Dollars	Unamortized Value
Underground	$91,227.89	$53,392.49
Brackets	$25,729.72	$16,915.27
Fixtures	$114,420.15	$76,859.85
Acct 106	$33,538.08	$31,928.14
Total	$264,915.84	179,095.75

Exhibit JDN 1

Table 3: Town's Records - Number of Municipal Requests for New Installations, Upgrades, or Changes since 12/31/95:

98

Year	Install New Fixtures & Brackets	Move Existing Fixtures & Brackets	Change Lumen Size	Town Accepts Payment Responsiblity	Total
1996	0	0	0	11	11
1997	0	1	0	21	22
1998	10	11	3	0	24
1999	0	1	0	6	7
2000	0	0	0	6	6
2001	11	2	0	3	16
2002	2	0	0	2	4
2003	1	1	0	6	8
Total	24	16	3	55	98

Exhibit JDN 1

Table 4

From MECO's Response to Town's Information Request 1-18

Record of Town Requests -

Number of Municipal Requests for New Installations, Upgrades, or Changes since 12/31/95:

78

Year	Install New Fixtures & Brackets	Move Existing Fixtures & Brackets	Change Lumen Size	Town Accepts Payment Responsiblity	Total
1996	5	3	1	19	28
1997	0	0	0	0	0
1998	0	0	0	0	0
1999	1	4	2	9	16
2000	0	0	0	6	6
2001	11	2	0	3	16
2002	2	0	0	2	4
2003	1	1	0	6	8
Total	20	10	3	45	78

Exhibit JDN 2

Brite - Lite Electrical Company Report

Report of Brite-Lite Electrical Company

Head Replacements, Bracket Replacements, Pole Replacements

In Natick, Waltham, Watertown and Westwood

We have reviewed our inventory and repair records since the inception of our lump sum maintenance contract in Natick, Waltham, Watertown and Westwood. The following table reports the total numbers of heads (or fixtures) replaced, brackets replaced, and dedicated poles that were replaced since the inception of those service contracts, for any and all reasons. That would include storm damage, accidents, or end of life issues. This is the comprehensive list of all replacements of this type of equipment for the period covered by our service contract in these four communities.

For reference purposes, these four communities converted to high pressure sodium in the early 1990's, which would make the inventory approximately 10 years old, during the period covered by these inventory replacement records.

Totals Since Start of Service

Town	Mnths of service	Lghts	Head replc.	Head replc year	Ded Poles	Ded. Poles knocks	Ded Poles year	Brkts replc	Brkts year
Natick	18	2437	18	12	145	1	.67	0	0
Walm	23	4197	20	10.4	238	1	.52	0	0
Water	15.75	2108	11	8.4	208	0	0	1	.76
West.	24.5	1216	7	3.4	116	1	.49	0	0
Total		9958	56		707	3		1	

The following three tables, convert the installations reported in Table 1 to annualized averaged installations.

Head Replacement Frequency as Percentage of Total Lights

Town	Lights	Head Replaced per year	% heads replaced per year	Average Frequency per Town
Natick	2437	12	. 50 %	
Waltham	4197	10.4	.24%	
Watertown	2108	8.4	.4%	
Westwood	1216	3.4	.27%	
Total	9958			.35%

Bracket Replacement Frequency as Percentage of Total Lights

Town	Lights	Brackets replaced per year	% Brackets replaced per year	Average Frequency per town
Natick	2437	0	0%	
Waltham	4197	0	0%	
Watertown	2108	.76	.036%	
Westwood	1216	0	0%	
Total	9958	.76		.009%

Dedicated Pole Knockdown Frequency

Town	Dedicated Poles	Dedicated Knocked Down per year	% Dedicated Poles Knocked Down per year	Average Frequency per town
Natick	145	.67	.4 %	
Waltham	238	.52	.2 %	
Watertown	208	0	0%	
Westwood	116	.49	.4%	
Total	707			.25%

You have also asked whether it would be normal to replace brackets at the time of a sodium conversion. The answer depends on whether the conversion was from incandescent fixtures to sodium, or mercury fixtures to sodium. Most communities went through two stages of streetlight conversion. The first stage (in the 1950's through the 1970's roughly), involved the conversion from incandescent fixtures to mercury fixtures, the second stage, again in most communities involved the conversion from mercury fixtures to sodium fixtures.

The old incandescent fixture was supported by a different type of bracket. Consequently the conversion from the incandescent to the mercury would require a new bracket to be installed. On the other hand, mercury and sodium fixtures are supported by the same type of bracket. It would not be normal to change out the brackets when converting from mercury fixtures to sodium fixtures.

Finally you have asked for the following installation costs in Calendar 2004 dollars.

1.	Mass Electric T pole	$ see below
2.	Sodium 4000 fixture 50 watt	$ 370
3.	Sodium 4000 fixture and bracket 50w	$ 550
4.	Sodium 9600 fixture 100 w	$ 370
5.	Sodium 9600 fixture and bracket 100 w	$ 550
6.	sodium 27,500 streetlight fixture 250 w	$370
7.	sodium 27,500 streetlight fixture and bracket 250 w	$550
8.	sodium 27,500 floodlight fixture 250 w	$370
9.	sodium 27,500 floodlight fixture and bracket 250 w	$550
10.	sodium 50,000 floodlight fixture 400w	$450
11.	sodium 50,000 floodlight fixture and bracket 400w	$630

Because the replacement of the so called Mass Electric T pole involves excavation, the cost of installing T poles can be influenced by the sub surface conditions as well as the surface conditions. For example sometimes it may require the replacement of decorative brick sidewalk, or section of roadway. In the simplest case it is straightforward excavation project that only requires re-seeding. Consequently it is probably more accurate to list the cost of that type of installation as ranging from a low of $3,500 to a high of $5,000**.** Assuming there is no foundation that needs to be replaced, or excavation the cost to simply install a new pole on existing foundation would be approximately $2,000.

JDN 3

Town List of Dedicated Poles
Included and Excluded from the Purchase

1. List of 157 dedicated poles installed before 1995 on Town streets that Town wishes to purchase.

Sort	Lumen	Pole Location	Town Street & accp year	Permit/Install date	Acc
0002	4000	Country Club Drive,145	A-1976	1-Jun-75	Tow
0003	4000	Country Club Drive,21	A-1976	1-Jun-75	Tow
0004	4000	Country Club@Burning Tree	A-1976	1-Jun-75	Tow
0005	4000	Country Club@Tam-O-Shante	A-1976	1-Jun-75	Tow
0006	27500	Church Sq.@D.McCahill Way	A-1976	1-Jun-82	Tow
0007	50000	Church Sq.@D.McCahill Way	A-1976	1-Jun-82	Tow
0008	27500	Church Square@Common	A-1976	1-Jun-82	Tow
0009	27500	Church Square@Main St.	A-1976	1-Jun-82	Tow
0010	9600	Greensfield Rd.@Greensfield	A-1990	1-Jun-86	Tow
0011	27500	Constitution Blvd,135.	A-1988	1-Jun-87	Tow
0012	27500	Constitution Blvd,145	A-1988	1-Jun-87	Tow
0013		Constitution Blvd.	A-1988	1-Jun-87	Tow
0014	27500	Constitution Blvd.,101	A-1988	1-Jun-87	Tow
0015		Constitution Blvd.,105	A-1988	1-Jun-87	Tow
0016	27500	Constitution Blvd.,109	A-1988	1-Jun-87	Tow
0017	27500	Constitution Blvd.,110	A-1988	1-Jun-87	Tow
0018	27500	Constitution Blvd.,115	A-1988	1-Jun-87	Tow
0019	27500	Constitution Blvd.,125	A-1988	1-Jun-87	Tow
0020	27500	Constitution Blvd.,125	A-1988	1-Jun-87	Tow
0021	27500	Constitution Blvd.,2	A-1988	1-Jun-87	Tow
0022	27500	Constitution Blvd.,55	A-1988	1-Jun-87	Tow
0023	27500	Constitution Blvd.,55	A-1988	1-Jun-87	Tow
0024	27500	Constitution Blvd.,77	A-1988	1-Jun-87	Tow
0025	27500	Constitution Blvd.,77	A-1988	1-Jun-87	Tow
0026	27500	Constitution Blvd@Upper Un	A-1988	1-Jun-87	Tow
0027	27500	Liberty Way	A-1988	1-Jun-87	Tow
0028	27500	Liberty Way	A-1988	1-Jun-87	Tow
0029	27500	Discovery Way,10	A-1989	1-Jun-87	Tow
0030	27500	Discovery Way,25	A-1989	1-Jun-87	Tow
0031	27500	Discovery Way@Const.Blvd	A-1989	1-Jun-87	Tow
0032	27500	Forge Parkway	A-1993	1-Jun-87	Tow
0033	27500	Forge Parkway	A-1993	1-Jun-87	Tow
0034	27500	Forge Parkway	A-1993	1-Jun-87	Tow
0035	27500	Forge Parkway	A-1993	1-Jun-87	Tow
0036	27500	Forge Parkway	A-1993	1-Jun-87	Tow

Sort	Lumen	Pole Location	Town Street & accp year	Permit/Install date	Acc
0037	27500	Forge Parkway	A-1993	1-Jun-87	Tow
0038	27500	Forge Parkway	A-1993	1-Jun-87	Tow
0039	27500	Forge Parkway	A-1993	1-Jun-87	Tow
0040	27500	Forge Parkway	A-1993	1-Jun-87	Tow
0041	27500	Forge Parkway	A-1993	1-Jun-87	Tow
0042	27500	Forge Parkway	A-1993	1-Jun-87	Tow
0043	27500	Forge Parkway	A-1993	1-Jun-87	Tow
0044	27500	Forge Parkway	A-1993	1-Jun-87	Tow
0045	27500	Forge Parkway	A-1993	1-Jun-87	Tow
0046	27500	Forge Parkway	A-1993	1-Jun-87	Tow
0047	27500	Forge Parkway	A-1993	1-Jun-87	Tow
0048	27500	Forge Parkway	A-1993	1-Jun-87	Tow
0049	27500	Forge Parkway	A-1993	1-Jun-87	Tow
0050	27500	Forge Parkway	A-1993	1-Jun-87	Tow
0051	27500	Forge Parkway	A-1993	1-Jun-87	Tow
0052	27500	Forge Parkway	A-1993	1-Jun-87	Tow
0053	27500	Forge Parkway	A-1993	1-Jun-87	Tow
0054	27500	Forge Parkway	A-1993	1-Jun-87	Tow
0055	27500	Forge Parkway	A-1993	1-Jun-87	Tow
0056	27500	Forge Parkway@West Cent.	A-1993	1-Jun-87	Tow
0057	4000	Kerrie Circle,5	A-1997	1-Jun-89	Tow
0058	4000	Longobardi Dr.@Kerrie Circle	A-1997	1-Jun-89	Tow
0059	4000	Longobardi Drive,14	A-1997	1-Jun-89	Tow
0060	4000	Bogastow Brook Lane,8	A-1999	1-Jun-90	Tow
0061	4000	Indian Brk.Lane@Noanet Brk	A-1999	1-Jun-90	Tow
0062	4000	Mill River Cir.@Mine Brk.Ct.	A-1999	1-Jun-90	Tow
0063	4000	Norumbega @Ashbury Drive	A-1999	1-Jun-90	Tow
0064	4000	Norumbega Cir.@Phillips Ln	A-1999	1-Jun-90	Tow
0065	4000	Charles Ri.Dr@Mill Riv.Circle	A-2000	1-Jun-90	Tow
0066	4000	Charles Ri.Rr@Charles Ri.Dr.	A-2000	1-Jun-90	Tow
0067	4000	Charles River Dr.@Indian Brk	A-2000	1-Jun-90	Tow
0068		Charles River Dr.@Mill Ri.Cir	A-2000	1-Jun-90	Tow
0069	4000	Charles River Dr.@Noanet Brk	A-2000	1-Jun-90	Tow
0070	4000	Charles River Drive,67	A-2000	1-Jun-90	Tow
0071	4000	Charles River Drive,81	A-2000	1-Jun-90	Tow
0072	4000	Toni Lane,3	A-1992	1-Jun-91	Tow
0073	4000	Delta Drive @ Delta Court	A-1993	1-Jun-91	Tow
0074	4000	Chilmark Road,17	A-1994	1-Jun-91	Tow
0075	4000	Chilmark Road,9	A-1994	1-Jun-91	Tow
0076	27500	National Drive	A-1995	1-Jun-91	Tow
0077	27500	National Drive	A-1995	1-Jun-91	Tow
0078	27500	National Drive	A-1995	1-Jun-91	Tow
0079	27500	National Drive	A-1995	1-Jun-91	Tow
0080	4000	Echo Brg.Rd.@Maple Brook	A-1999	1-Jun-91	Tow
0081	4000	Echo Brg.Rd.@Sewall Brook	A-1999	1-Jun-91	Tow
0082	4000	Echo Bridge Rd.@Farm Pond	A-1999	1-Jun-91	Tow

0083	4000	Farm Pond Lane,7	A-1999	1-Jun-91	Tow
0084	4000	Maple Brook Lane,5	A-1999	1-Jun-91	Tow
0085	4000	Charles Ri.Dr,@Echo Brg.Rd.	A-2000	1-Jun-91	Tow
0086	27500	East Central Street,36	A-1870	1-Jun-91	Tow
0087	27500	Main St.@ Emmons St.	A-1870	1-Jun-91	Tow
0088	27500	Main Street -Dean College	A-1870	1-Jun-91	Tow
0089	27500	Main Street -Dean College	A-1870	1-Jun-91	Tow
0090	27500	Main Street -Public Library	A-1870	1-Jun-91	Tow
0091	27500	Main Street,11	A-1870	1-Jun-91	Tow
0092	27500	Main Street@ Dean Bank	A-1870	1-Jun-91	Tow
0093	27500	Main Street@ Depot Street	A-1870	1-Jun-91	Tow
0094	4000	Main Street@Post Office	A-1870	1-Jun-91	Tow
0095	4000	Bridle Path,42	A-1994	1-Jun-92	Tow
0096	4000	Bridle Path,66	A-1994	1-Jun-92	Tow
0097	4000	Bridle Path@Surrey Way	A-1994	1-Jun-92	Tow
0098	4000	Phaeton Lane,5	A-1994	1-Jun-92	Tow
0099	4000	Phaeton Lane@Bridle Path	A-1994	1-Jun-92	Tow
0100	4000	Steeplechase Lane,3	A-1994	1-Jun-92	Tow
0101	4000	Steeplechase Ln@Bridle Path	A-1994	1-Jun-92	Tow
0102	4000	Surrey Way,11	A-1994	1-Jun-92	Tow
0103	4000	Amy's Way,25	A-1995	1-Jun-92	Tow
0104	4000	Amy's Way,4	A-1995	1-Jun-92	Tow
0105	4000	Amy's Way,6	A-1995	1-Jun-92	Tow
0106	4000	Amy's Way@ Natalie Circle	A-1995	1-Jun-92	Tow
0107	4000	Amy's Way@Eleanor Circle	A-1995	1-Jun-92	Tow
0108	4000	Eleanor Circle,4	A-1995	1-Jun-92	Tow
0109	4000	Natalie Circle,6	A-1995	1-Jun-92	Tow
0110	4000	Teresa Circle,4	A-1995	1-Jun-92	Tow
0111	4000	Teresa Circle@Amy's Way	A-1995	1-Jun-92	Tow
0112	4000	York Lane,4	A-1995	1-Jun-92	Tow
0113	4000	York Lane@Bedford Road	A-1995	1-Jun-92	Tow
0114	4000	Phillips Pond Lane,6	A-1999	1-Jun-92	Tow
0115	4000	Berkeley Dr.@Beacon Place	A-2000	1-Jun-92	Tow
0116	4000	Berkeley Dr.@Gloucester Dr.	A-2000	1-Jun-92	Tow
0117	4000	Berkeley Drive,10	A-2000	1-Jun-92	Tow
0118	4000	Berkeley Drive,2	A-2000	1-Jun-92	Tow
0119	4000	Charles Ri.Dr@Norumbega Cir	A-2000	1-Jun-92	Tow
0120	4000	Charles Ri.Dr@Norumbega CirIntersection	A-2000	1-Jun-92	Tow
0121	4000	Gloucester Drive,7	A-2000	1-Jun-92	Tow
0122	4000	Newell Drive,24	A-2001	1-Jun-92	Tow
0123	4000	Lisa Lane,617	A-1976	1-Jun-93	Tow
0124	4000	Lisa Lane,625	A-1976	1-Jun-93	Tow
0125	27500	Freedom Way	A-1994	1-Jun-93	Tow
0126	27500	Freedom Way	A-1994	1-Jun-93	Tow
0127	27500	Freedom Way@Constitution	A-1994	1-Jun-93	Tow
0128	4000	D'Amico Drive,11	A-1996	1-Jun-93	Tow
0129	4000	D'Amico Drive,4	A-1996	1-Jun-93	Tow

0130	4000	Peppermill @ Peppertree	A-1996	1-Jun-93	Tow
0131	4000	Peppermill Lane,10	A-1996	1-Jun-93	Tow
0132	4000	Peppermill Lane,3	A-1996	1-Jun-93	Tow
0133	4000	Mary Ellen Ln@Margaret's Co	A-1997	1-Jun-93	Tow
0134	4000	Charles Ri.Dr@Franklin Sp.Rd.	A-2000	1-Jun-93	Tow
0135	4000	Charles Ri.Dr@Harlow Pond	A-2000	1-Jun-93	Tow
0136	4000	Charles Ri.Dr@Morse Pond	A-2000	1-Jun-93	Tow
0137	4000	Alexandria Drive,5	A-1995	1-Jun-94	Tow
0138	4000	Barbara Circle,6	A-1997	1-Jun-94	Tow
0139	4000	Evergreen Drive,14	A-1997	1-Jun-94	Tow
0140	4000	Evergreen Drive,19	A-1997	1-Jun-94	Tow
0141	4000	Griffin Rd.@Matthew Dr.-East	A-1997	1-Jun-94	Tow
0142	4000	Griffin Rd.@Matthew Dr.-West	A-1997	1-Jun-94	Tow
0143	4000	Matthew Drive,15	A-1997	1-Jun-94	Tow
0144	4000	Matthew Drive,9	A-1997	1-Jun-94	Tow
0145	4000	Rosewood Lane,7	A-1997	1-Jun-94	Tow
0146	4000	Ashley Circle,4	A-1999	1-Jun-94	Tow
0147	4000	Cranberry Drive,5	A-1999	1-Jun-94	Tow
0148	4000	Winterberry Dr.@Huckleberry	A-1999	1-Jun-94	Tow
0149	4000	Winterberry Dr.@Winterberry	A-1999	1-Jun-94	Tow
0150	4000	Winterberry Drive	A-1999	1-Jun-94	Tow
0151	4000	Winterberry Drive,23	A-1999	1-Jun-94	Tow
0152	4000	Winterberry Drive,33	A-1999	1-Jun-94	Tow
0153	4000	Winterberry Drive,47	A-1999	1-Jun-94	Tow
0154	4000	Winterberry@Cranberry Dr.	A-1999	1-Jun-94	Tow
0155	4000	Winterberry@Huckleberry Ln	A-1999	1-Jun-94	Tow
0156	4000	Franklin Spring Rd.@Maple St	A-2000	1-Jun-94	Tow
0157	4000	Harlow Pond Court,3	A-2000	1-Jun-94	Tow
0158	4000	Morse Pond Court,4	A-2000	1-Jun-94	Tow

2. List of 76 dedicated poles that Town wishes to exclude form the purchase installed in 1995 or later (56 poles) or installed before 1996 but on private streets (20).

Sort	Lumen	Pole Location	Town Street & accp year	Permit/Install date	Acct
0161	9600	Greensfield Lane,14	N-A	1-Jun-86	Town
0162	4000	Town Line Road,7	N-A	1-Jun-88	Town
0163	4000	Delta Drive@ Chilmark Road	N-A	1-Jun-91	Town
0164	4000	Dover Circle,14	N-A	1-Jun-91	Town
0165		Kara-Lyn Drive	N-A	1-Jun-91	Town
0166	4000	Kara-Lyn Drive	N-A	1-Jun-91	Town
0167	4000	Kara-Lyn Drive	N-A	1-Jun-91	Town
0168	9600	Dover Cir.@Sherborn Lane	N-A	1-Jun-92	Town
0169	4000	Catherine Avenue	N-A	1-Jun-93	Town
0170	4000	Margarets Cove@Maryellen Ln	N-A	1-Jun-93	Town
0171	4000	Ainsley Drive,8	N-A	1-Jun-94	Town
0172	4000	Ainsley Drive@Ashley Circle	N-A	1-Jun-94	Town
0173	4000	Kayla Drive,1	N-A	1-Jun-94	Town
0174	4000	Kayla Drive,5	N-A	1-Jun-94	Town
0175	4000	Lasden Brothers Way,3	N-A	1-Jun-94	Town
0176	4000	Lasden Brothers Way,6	N-A	1-Jun-94	Town
0177	4000	Woodhaven Dr.@Crystal Dr.	N-A	1-Jun-94	Town
0178	4000	Woodhaven Drive,15	N-A	1-Jun-94	Town
0179	4000	Woodhaven Drive,23	N-A	1-Jun-94	Town
0180	4000	Woodhaven Drive,3	N-A	1-Jun-94	Town
0181	4000	Beaver Court @J.R's Lane	N-A	1-Jun-95	Town
0182	4000	Crystal Drive @ Dena Drive	N-A	1-Jun-95	Town
0183	4000	Crystal Drive,10	N-A	1-Jun-95	Town
0184	4000	Crystal Drive,4	N-A	1-Jun-95	Town
0185	27500	Fawn Lane,10	N-A	1-Jun-95	Town
0186	4000	J.R.'s Lane	N-A	1-Jun-95	Town
0187	4000	Juna Way,15	N-A	1-Jun-95	Town
0188	4000	Mark's Way	N-A	1-Jun-95	Town
0189	4000	Stratford Lane,6	N-A	1-Jun-95	Town
0190	4000	Town Line Rd @ Hamel Ct.	N-A	1-Jun-95	Town
0191	4000	Town Line Rd. @ Bell Circle	N-A	1-Jun-95	Town
0192	4000	Town Line Road,14	N-A	1-Jun-95	Town
0193	4000	Town Line Road,19	N-A	1-Jun-95	Town
0194	4000	Town Line Road,21	N-A	1-Jun-95	Town
0195	4000	Town Line Road,31	N-A	1-Jun-95	Town
0196	4000	Tyler Road	A-1999	1-Jun-95	Town
0197	4000	Cardinal Drive,9	A-1996	1-Jun-96	Town
0198	27500	Crystal Pond Lane,24	N-A	1-Jun-96	Town
0199	27500	Crystal Pond Lane,8	N-A	1-Jun-96	Town
0200	4000	Deerview Way@Cranberry Dr.	N-A	1-Jun-96	Town
0201		High Ridge Circle	A-2000	1-Jun-96	Town

0202	4000	High Ridge Circle,13	A-2000	1-Jun-96	Town
0203	4000	High Ridge Circle,30	A-2000	1-Jun-96	Town
0204	4000	High Ridge Circle,40	A-2000	1-Jun-96	Town
0205	27500	Lorraine Metcalf Rd.,40	N-A	1-Jun-96	Town
0206	27500	Palomino Dr., 50	N-A	1-Jun-96	Town
0207	27500	Palomino Dr.@ Canter Drive	N-A	1-Jun-96	Town
0208	27500	Palomino Dr.@Palomino Dr.	N-A	1-Jun-96	Town
0209	27500	Palomino Drive,32	N-A	1-Jun-96	Town
0210	27500	Palomino Drive,58	N-A	1-Jun-96	Town
0211	27500	Palomino Drive,72	N-A	1-Jun-96	Town
0212	27500	Palomino Drive@Canter Drive	N-A	1-Jun-96	Town
0213	27500	Palomino Drive@Derby Lane	N-A	1-Jun-96	Town
0214	4000	Stewart Street,28	A-1966	1-Jun-96	Town
0215	4000	Stewart Street,60	A-1966	1-Jun-96	Town
0216	4000	Stewart Street@Acorn Place	A-1966	1-Jun-96	Town
0217	4000	Dom Lea Circle,16	A-2000	1-Jun-97	Town
0218	4000	Dom Lea Circle,8	A-2000	1-Jun-97	Town
0219		Meadowlark Ln@Acorn Place	A-1999	16-Sep-97	Town
0220	4000	Cooper Drive,26	A-2000	1-Jun-98	Town
0221	4000	Zachary Lane,8	A-2000	1-Jun-98	Town
0222	4000	Padden Rd.@Longhill Road	N-A	31-Dec-98	Town
0223	4000	Padden Rd.@Philomena Way	N-A	31-Dec-98	Town
0224	27500	Padden Road,19	N-A	31-Dec-98	Town
0225	4000	Philomena Wy.@Longhill Rd.	A-2000	31-Dec-98	Town
0226	27500	Meadowlark Lane,47	A-1999	12-Jan-99	Town
0227	4000	Philomena Way,12	A-2000	22-Jan-99	Town
0228	4000	Philomena Way,30	A-2000	22-Jan-99	Town
0229	4000	Philomena Way,34	A-2000	22-Jan-99	Town
0230	4000	Emily Drive,20	A-2000	16-Mar-99	Town
0231	4000	Emily Drive@Cooper Drive	A-2000	16-Mar-99	Town
0232	4000	Meetinghouse Lane	N-A	30-Jun-99	Town
0233	4000	Tanglewood Dr.@Sierra Dr.	N-A	25-Aug-99	Town
0234	4000	Tanglewood Drive,21	N-A	25-Aug-99	Town
0235	4000	Tanglewood Drive,4	N-A	25-Aug-99	Town
0236	4000	Bell Circle,5	N-A	1-Jun-01	Town

JDN 4 Stone and Webster Allocation
Existing Plant Value

Massachusetts Electric Account 373 Streetlight Net Book Value						
	Franklin			Swampscott		
	Total	Town	Non Town	Total	Town	Non Town
Base Case						
MECo @ Jan 31, 2003						
Existing Plant	337,601	263,329	74,272	166,600	152,773	13,828
Retired Plant	214,809	167,551	47,258	61,704	56,582	5,121
TOTAL	**552,410**	430,880	121,530	**228,304**	209,355	18,949
Allocation		78.0%	22.0%		92%	8%
Base Case						
MECo @ Jan 1, 2004						
Existing Plant	274,885	214,410	60,475	122,741	112,553	10,187
Retired Plant	214,778	167,527	47,251	61,649	56,532	5,117
TOTAL	**489,662**	381,937	107,726	**184,390**	169,086	15,304
Allocation		78.0%	22.0%		92%	8%
S&W Analysis						
@ Jan 1, 2004						
Existing Plant						
UG post '94 excluded	77,444	-	77,444			
Pre Conversion	84,700	66,123	18,577	28,287	26,024	2,263
Post Conversion	112,741	24,727	88,014	94,454	7,382	87,072
Existing Plant	**274,885**	90,850	184,035	**122,741**	33,406	89,335
Pre Conversion		78%	22%		92%	8%
Post Conversion		22%	78%		8%	92%
Allocation		33.1%	66.9%		27%	73%